

brown, curved and heavily spiked with black spines located mostly in front and in back. The last segment was green dotted with raised, black granulations. The spiracles were rose-red edged with pale yellow.

In this stage the following should distinguish it from *H. chersis*: much like *H. chersis* but smaller ($2\frac{1}{2}$ - $2\frac{3}{4}$ inches as against $3\frac{1}{2}$ -4 inches in length for *H. chersis* and less than half the diameter). The caudal horn is grass green, never bluish or yellowish as in *H. chersis*. While there was considerable variation in colors, all the larvae were very white on the dorsum, never bluish or yellow, and the terminal plates had raised black dots (granulations). It should be clearly understood, moreover, that while the larva of *H. canadensis* has been compared with that of *H. chersis*, the two are not to be confused in their red phases. That of *H. chersis* is dull red all over, while that of *H. canadensis* is of spots and blotches of a different shade of red. The latter species also present an almost unlimited degree of variation in the extent and arrangement of spotting, and, if any segments are entirely red, it is only the last three or four with the remainder of the dorsum white as in all the spotted varieties.

Pupa. The pupae are $1\frac{13}{32}$ inches long, $\frac{3}{8}$ of an inch in diameter, and are dark brown. A short tongue case is present, humped up in the middle, and touching at the slightly enlarged tip. The pupa is difficult to separate with certainty from that of *H. luscitosa* Clem., and is the same size and color.

Descriptions of some North American Micropezidae (Diptera).

By EZRA T. CRESSON, Jr., Philadelphia, Pennsylvania.

The following species were encountered while working on a revision of the Nearctic species of this family.

Micropeza abnormis new species.

Similar to the European *M. corrigiolata* (Linn.) differing most noticeably in having the antennae pale in both sexes, in the form of the claspers and in the color of the ovipositor.

♂, ♀. Black as follows: Head except face, bucca, lateral and posterior-oral margins; antennae; thorax except areas around coxae; tarsi; abdomen except male genital segments, claspers and first segment of ovipositor. Pale genitalic segments of male with median dark spot. Basal segment of ovipositor reddish to yellowish. Coxae, femora and tibiae pale except a disto-median and apical flexor spots on femora, and

apices of tibiae. Palpi and wing veins dark. Arista white; halteres pale.

Thorax and abdomen more or less cinerous but never densely so. Otherwise surfaces more or less shining; the face with usual silvery reflection.

Head relatively stout, almost as high as long (as 27:30); the postorbital swelling about .3 length of head. One notopleural bristle; no pectoral pile or pile on posterior surface of hind femur. Marginal setae on tergites and sternites not conspicuous but discernable in the female sex.

Claspers situated distad close to genital segments, small, scarcely as long as length of tergite V, turgid, their apices rather knob-like, curving mesad hood-like; their cephalic surface sparingly black pilose. Second vein almost straight in entering costa; third costal section .25 length of ultimate of vein IV; first posterior cell closed or nearly closed in margin.

Length: 4-4.5 mm.

Type.—Male; Baboquivari Mountains, ARIZONA, (R. H. Beamer; July 19, 1932), [Kans. Univ. Colln.]. *Paratypes*.—5 ♂, 4 ♀; with same data.

***Micropeza compar* new species.**

Structurally similar to *Micropeza turcana* Townsend (1892); but paler in color, and antennae of the male yellow.

♂. Pale species, with black to ferruginous as follows: Ocellar spot, broad lateral margins of vertex attenuated to foramen, median line on mesofrons, small foveal spot; four antesutural lines, the lateral one abbreviated cephalad but extending postsuturally, a paler median postsutural line extending onto scutellum, broad pleural band and metanotum. Tergites more or less brownish except at margins, the usual sinistral black spot on genital segment distinct. Arista black. Femora with more or less distinct disto-median extensor spot and their apices dark; apices of tibiae and all tarsi, black.

Head robust about 1.5 longer than high; pectoral and hind femoral pile very sparse; claspers large, broad, easily attaining base of abdomen, with apical fingers comparatively but slightly curved.

♀. Similar to the male but darker; antennae showing some infuscation but never intensely black and the third always pale at inferior margin; dark markings somewhat more extensive and the tergites showing very narrow pale margins; ovipositor segment dark basally.

Length: ♂, ♀ exclusive of ovipositor, 6 mm.

Type.—Male; Huachuaca Mountains, ARIZONA, July 8, 1932,

(R. H. Beamer). [Kans. Univ. Colln.]. *Paratypes*.—1 ♂ ; 2 ♀ ; topotypical. 3 ♀ , Chiricahua Mountains, July 8, 1932; and 1 ♀ , Santa Rita Mountains, Arizona, July 7, 1932; (all R. H. Beamer).

***Micropeza atra* new species.**

Although the male of this species is unknown, I suspect, from the general habitus of this female that we have a species of the *turcana* group, and I further suspect that the male will prove to have the genitalic development of this group and that the claspers will be short of the *lineata* type.

I would hesitate to erect a new species on the female sex, but here we find one that is so distinct in having the thorax entirely black and more densely pollinose than is usual with the other species of this group. I cannot consider it a dark variety of *setaventris* because of its lacking the characteristic sternal setae of that species; and I do not think it can be an extreme, dark form of the *turcana* assemblage. It should not be confused with either *abnormis* here described or *nitida* Hennig, both belonging to other species groups.

Black, including antennae and arista, the former of which however may be brownish. Yellow to tawny are: the face, oral margin, mouthparts, prosternum, all coxae, halteres, very narrow apices of tergites. Fore femur black, pale basally; mid and hind femora tawny, darker basally and at extreme apices; tibiae and tarsi black. Wing veins brownish.

Head mostly shining to polished, with the usual cinereous postocellar area and the silvery facial reflections. Mesonotum rather densely cinereous, but not opaque, becoming shining towards humeri; pleura somewhat niveous. Scutellum and notopleura similar to mesonotum. Abdomen sparsely brown pollinose. Ovipositor polished.

Head robust about 1.5 as long as high. One notopleural bristle. Sternites narrow, inconspicuously setose laterally; ovipositor segment about as long as the abdomen. Third costal section about .5 as long as the ultimate of vein IV; first posterior cell open.

Length, 5 mm. excl. ovipositor.

Type.—Female: Flagstaff, Coconino County, ARIZONA. June 7, (H. S. Barber), [U. S. N. M., no. 27059].

***Micropeza setaventris* new species.**

Similar to *M. turcana* Townsend (1892) but postorbital

region and occiput black as are also the entire mesonotum and lower portion of pleura.

♂, Mostly black with following pale yellow to reddish: frontal orbits above; narrow area around ocelli; face, oral margin, notopleural stripe, supra-alar margin of mesonotum, pectal margin of sternopleura and halteres; more or less of abdomen beyond tergite II and claspers; coxae and legs except tarsi. Apical flexor spot on femora and apices of tibiae are dark.

Head robust, about 1.5 as long as high; claspers short, not nearly attaining base of abdomen, very strongly setose apically; hind femora with some flexose pile on posterior surface.

♀. Similar to the male but darker, the pale markings being reduced; abdomen except narrow margins of tergites, black; sternites with lateral margins bearing long setae which are longer than width of sternite, interspersed with smaller setae.

Length, ♂, ♀ exclusive of ovipositor, 2.7 to 4 mm.

Type.—Male; Fort Duchesne, Uintah County, UTAH, June 28, 1937, (G. F. Knowlton), [A.N.S.P. no. 6536].

Paratypes.—1 ♀ topotypical, with same data. 9 ♂, 11 ♀; Hooper, Weber County, July 15, 1937 (D. E. Hardy). 1 ♂; Huntsville, Weber County, July 10, 1937 (G. F. Knowlton). 1 ♂, 3 ♀; Smithfield, Cache County, July 11, 1937 (Smith & Harmston). 1 ♀; Richmond, Cache County, July 2, 1937, (G. F. Knowlton). 1 ♂; Bingham Canyon, Box Elder County, July 15, (Knowlton & Harmston), all in Utah.

Micropeza texana new species.

Very similar to *M. producta* Walker (1849) but distinct in its trivittate mesonotum.

♂. Yellow to ferrugineous including palpi. Black to brown are: vertex and upper half of postorbital region and occiput except narrowly around ocelli, a narrow line including outer verticals, frons, foveae and antennae (arista pale but not niveous); a median antesutural and two postsutural stripes on mesonotum, the median one continuous narrowly caudad, the others continued broadly cephalad of the suture and attenuated caudad, scutellum except pale apex; pleural line including propleural scale and continuous with the black metanotum; a pectoral line; abdominal tergites except narrow margins; two spots on male genital segment; distomedian and apical rings on femora; broad apices of tibiae and all tarsi. Halteres dark in part.

More or less shining species but mesonotum and particularly

the pleura are distinctly cinereous, almost obscuring the ground color pattern; abdomen as usual somewhat grayish and sub-opaque. Venation rather dark.

Head slender and elongate, about twice as long as high (as 30:15); two notopleurals. Tergites II and IV slightly longer than V and VI. Claspers of male similar to those of *producta* but the fingers more slender; styli also similar to those of *producta* but the longer lateral prong is more slender and thorn-like. Second vein rather abruptly curving into the costa, apportioning the third costal section to about .3 of ultimate of vein IV. First posterior cell closed and petiolate.

Length, 4 mm.

Type.—Male; Corpus Cristi, Nueces County, TEXAS, (F. C. Pratt; April 13, 1906), [U.S.N.M., no. 27061]. *Paratype*.—1 ♂; topotypical with same data.

Taeniaptera brunneipes new species.

Similar to *Calobata antennaepes* Say, 1823, but darker. Third antennal segment black; the usual disto-medial dark ring of mid and hind femora broader extending almost to base of these members; the mid and hind metatarsus almost as dark as the distal segments.

Type.—Male; Broad Creek, near Washington, DISTRICT OF COLUMBIA, May 19, 1922, (E. G. Vanatta; from Bald Eagle's nest), [A.N.S.P., no. 6288].

Paratypes.—1 ♂, 1 ♀; topotypical with same data. 1 ♂, 2 ♀; Swarthmore, Delaware County, PENNSYLVANIA, June 18, 1905, June 10, 1906, July 4, 1907, (E. T. Cresson, Jr.).

An Annotated List of The Butterflies of Nebraska (Lepid.: Rhopalocera).

By R. A. LEUSSLER, Omaha, Nebraska.

(Continued from page 9.)

19. *EUCHLOE AUSONIDES* (Bdv.) race *COLORADENSIS* (Hy. Edw.). Apparently confined to the western part of the state, where it flies on the pine-clad slopes. Sioux County, May 27 and July 10, 1900 (Wolcott) and June 5, 1919 (Leussler). The form found here is identical with that found in the Front Range, Rocky Mountains, Colorado. It differs from the Pacific Coast form in the smaller size, and more slender discal black spots of primaries.

20. *ZEGRIS OLYMPIA* (Edw.) race *ROSA* (Edw.). Rare. One specimen, Omaha, May 4, 1926, 1 from Omaha, May 24,